

We claim:

1. An apparatus to facilitate removal of seeds from a top of an air bed, the apparatus residing in an air kettle for a seed dryer where the air kettle has at least one plenum and at least one diffuser that direct air towards a bottom of a seedbed, the apparatus comprising:
 - 5 at least one perforation in at least one of the at least one diffusers;
at least one deflector cap coupled to the at least one diffuser and located about the at least one perforation; and
at least one air path, the at least one air path formed between the at least one diffuser and the at least one deflector cap,
 - 10 wherein air from an air supply travels through the at least one perforation and is directed through the at least one air path by the deflector cap such that removal of dry seeds is facilitated by the air.
2. The apparatus according to claim 1, further comprising:
at least one accumulated seed removal air supply plenum, wherein the at least one accumulated seed removal air supply plenum couples an air supply to the at least one perforation.
- 5 3. The apparatus according to claim 1, wherein the at least one air path further comprises at least one of a fan, a blower, a nozzle, and a jet.
4. The apparatus according to claim 1, wherein the at least one perforation comprises a plurality of perforations.
5. The apparatus according to claim 4, wherein the plurality of perforations are arranged in a pattern about a central geometric axis of the at least one diffuser.
6. The apparatus according to claim 4, wherein the plurality of perforations reside substantially aligned with the at least one deflection cap.

7. The apparatus according to claim 1, wherein the at least one perforation is cylindrical.

8. The apparatus according to claim 1, wherein the at least one perforation is shaped, the shape being at least one of a group of shapes comprising: a cylindrical shape, a conical shape, a cubic shape, and an hourglass shape.

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9. A kettle for use in a seed dryer, the kettle comprising:
a sidewall, a kettle top, and a kettle bottom;
the sidewall, the kettle top, and the kettle bottom defining a seedbed;
at least one plenum, the at least one plenum comprising an air supply
5 opening, outside walls, and an air supply exhaust, the outside walls defining
an air supply path;
the at least one plenum residing in the seedbed such that the air supply
opening resides towards the kettle top and the air supply exhaust resides
towards the kettle bottom; and
10 at least one deflector cap residing substantially about the air supply
opening to deflect a first portion of the air supply to a surface of the seedbed
to facilitate removal of accumulated seeds and a second portion of the air
supply exits the air supply exhaust towards the kettle bottom.

10. The kettle according to claim 9, wherein further comprising:
at least one diffuser located about the air supply opening of the at least
one plenum;
at least one perforation located about a top of the at least one diffuser,
5 the at least one perforation splitting the air supply into the first portion and
the second portion;
the at least one deflector cap coupled to the at least one diffuser about
the at least one perforation.

11. The kettle according to claim 10, wherein the at least one
perforation comprises a plurality of perforations.

12. The kettle according to claim 9, wherein the first portion of the
air supply travels through at least one of a nozzle, a jet, and a blower.

13. The kettle according to claim 9, wherein the at least one
deflector cap comprises at least one perforation to split the air supply into a
first portion and a second portion.

14. A seed dryer comprising:
a air supply; and
a kettle, the kettle having a bottom, a top, and a sidewall all of which
define a seedbed;
5 means for supplying drying air from the air supply to the bottom of the
kettle, such that the supplied air fluidizes the seedbed to assist in even drying
of moist seeds contained in the seedbed; and
means for supplying accumulated seed removal air to a surface of the
seedbed to facilitate the removal of accumulated seeds.

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15. The seed dryer according to claim 14, wherein the means for
supplying accumulated seed removal air uses a portion of the air supplied by
the means for supplying drying air.

16. The seed dryer according to claim 15, wherein:
the means for supplying drying air comprises at least one plenum and
at least one diffuser arranged substantially about the at least one plenum;
the means for supplying accumulated seed removal air comprises at
5 least one perforation in the at least one diffuser and at least one deflector cap
arranged substantially about at least one perforation to direct accumulated
seed removal air towards the accumulated seeds.

17. The seed dryer according to claim 14, wherein the means for
supplying accumulated seed removal air comprises an accumulated seed
removal air supply plenum and a deflector cap.

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